

CLAIMS

1 1. A method of powering an audio output device of a computer system,
2 comprising the steps of:

3
4 determining whether a passive or active audio output device is connected to an
5 audio output jack of the computer system; and

6
7 based on said determining step, providing one of a plurality of different power
8 levels to the audio output jack.

9
10 2. The method of Claim 1, wherein said determining step includes the step of
11 sensing an impedance at the audio output jack.

12 3. The method of Claim 1 wherein:

13 said determining step determines that a passive audio output device is
14 connected to the audio output jack; and

15 said providing step applies a 3-watt power signal to the audio output jack.

16 4. The method of Claim 1, wherein:

17 said determining step determines that an active audio output device is
18 connected to the audio output jack; and

19 said providing step applies a 1/4-watt power signal to the audio output jack.

1 5. The method of Claim 2, wherein said sensing step includes the step of
2 comparing a load voltage associated with the impedance to a reference voltage.

1 6. The method of Claim 1, wherein said providing step includes the step of
2 selectively controlling the output of a switch device having a first input from an AC97
3 audio codec and headphone amplifier and a second input from a passive speaker
4 amplifier.

FOR FURTHER INFORMATION

1 7. A circuit for powering an audio output device of a computer system,
2 comprising:

3 an audio output jack;

4 means for determining whether a passive or active audio output device is
5 connected to said audio output jack; and

6 means for providing one of a plurality of different power levels to said audio
7 output jack based on said determining means.

8 8. The circuit of Claim 7, wherein said determining means includes means for
 sensing an impedance at said audio output jack.

9 9. The circuit of Claim 7, wherein when said determining means determines that
 a passive audio output device is connected to said audio output jack, said providing
 means applies a 3-watt power signal to said audio output jack.

10 10. The circuit of Claim 7, wherein when said determining means determines that
 an active audio output device is connected to said audio output jack, said providing
 means applies a 1/4-watt power signal to said audio output jack.

1 11. The circuit of Claim 8, wherein said sensing means includes the means for
2 comparing a load voltage associated with the impedance to a reference voltage.

1 12. The circuit of Claim 7, wherein said providing means includes a switch device
2 having a first input from an AC97 audio codec and headphone amplifier and a second
3 input from a passive speaker amplifier.

1 13. The circuit of Claim 12, wherein said AC97 audio codec and headphone
2 amplifier has an output connected to an input of said passive speaker amplifier.

1 14. The circuit of Claim 9, wherein said active audio output device is a
2 headphone.

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1 15. A computer system comprising:

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3 means for processing program instructions;

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5 memory means for storing program instructions and operand data;

6
7 bus means for interconnecting said processing means and said memory means;

8
9 an audio circuit connected to said processing means for providing an audio
10 signal;

11
12 an audio output jack;

13
14 a passive speaker amplifier;

15
16 an AC97 audio codec and headphone amplifier;

17
18 means for determining whether a passive or active audio output device is
19 connected to said audio output jack; and

20 means for providing one of a plurality of different power levels to said audio
21 output jack based on said determining means.